

CHAPTER 2
SCIENCE INQUIRY

BLM 2-13

Exploring the Different Ways that Cells Divide

Goal • Use this page to explore the concepts around cell division.

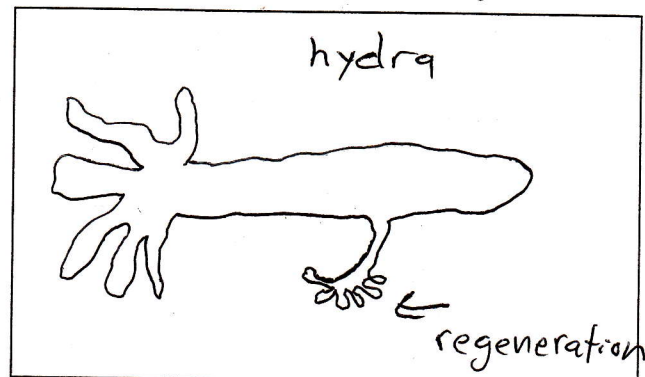
What to Do

- Answer the questions below in full sentences. For assistance, refer to pages 53–55 of *SCIENCEPOWER*™ 8.

- Why do you think cells divide? Grow, develop, + pass on genetic material
- What is regeneration? ability to grow new body parts to replace damaged parts
- What is mitosis? cell duplicates its genetic material to make 2 new cells
- Complete the following number pattern: 1 2 4 8 16 32, 64, 128, 256

- Describe how the pond organism called hydra is able to "grow" more body parts. Include a diagram beside your description, in the empty box.

regeneration



- Which cells in your body are replaced after a few days or weeks? skin
- Which cells in your body last the longest? nerve
- How long do they last? nerve
- Give three examples of how organisms use regeneration to grow new body parts:
 - lobsters - legs
 - lizards - tail
 - deer - antlers
- How can a flower shop use a plant's ability to regenerate to make more profit?
take "cuttings" to make more plants.